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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/591,891	06/09/2000	Michael E. Knappe	2705-104	4437

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EXAMINER

JUNG, MIN

ART UNIT PAPER NUMBER

2663

DATE MAILED: 10/08/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

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# Office Action Summary

Application No.

09/591,891

Applicant(s)

KNAPPE ET AL.

Examiner

Min Jung

Art Unit

2663

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 09 June 2000.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-39 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,3,6-8,10,14,17-30,34-37 and 39 is/are rejected.
- 7) ☒ Claim(s) 2,4,5,9,11-13,15,16,31-33 and 38 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 2.
- 4) ☐ Interview Summary (PTO-413) Paper No(s) \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

2. Claims 1, 3, 6-8, 10, 14, 17, 18, 24, 27-30, 34, 36, 37, 39 are rejected under 35 U.S.C. 102(e) as being anticipated by Connor et al., 6,011,851 (Connor).

The applied reference has a common assignee with the instant application. Based upon the earlier effective U.S. filing date of the reference, it constitutes prior art under 35 U.S.C. 102(e). This rejection under 35 U.S.C. 102(e) might be overcome either by a showing under 37 CFR 1.132 that any invention disclosed but not claimed in the reference was derived from the inventor of this application and is thus not the invention "by another," or by an appropriate showing under 37 CFR 1.131.

Connor discloses a spatial audio processing method and apparatus for context switching between telephony applications. Specifically, Connor teaches a voice conferencing method comprising: concurrently receiving a first packet voice data stream from a first conferencing endpoint and second packet voice data stream from a second conferencing endpoint (source 1, source 2, and source 3); mapping the voice data from the first packet voice data stream to a first set of presentation mixing channels in a manner that simulates that voice data as originating in a first sector of a presentation sound field (back/left spatial processor 36); mapping the voice data from the second packet voice data stream to a second set of presentation mixing channels in a manner that simulates that voice data as originating in a second sector of a presentation sound field, the second sector substantially non-overlapping the first sector (front/center spatial processor 38); and mixing each channel from the first set of presentation mixing channels with the corresponding channel from the second set of presentation mixing channels to form a first set of mixed channels (audio mixer 42, and the set of audio channels 48 and 50). See col. 3, line 58 – col. 4, line 9.

Further, Connor teaches the voice arrival direction associated with each source (col. 3, lines 58-63), and teaches sector division by showing differently located sources (Fig. 2).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. . Patentability shall not be negated by the manner in which the invention was made.

4. Claims 19-23, 25-26, and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Connor.

Connor fails to specifically teach the GUI allowing the listener to specify the number and location of presentation channel acoustical speakers relative to that listener's position in a room, recurrently updating the GUI with a visual indication of which endpoints are currently transmitting data, automatically dividing the presentation sound field into sectors that allocate approximately equal shares of the presentation sound field to each endpoint, tracking the number of conference endpoints participating in a conference, and automatically altering the allocation of the presentation sound field as endpoints are added to or leave the conference, allocating a larger sector of the sound field to a conferencing endpoint that is broadcasting multiple capture channels than is allocated to a conferencing endpoint that is broadcasting monaurally, etc. However, Connor teaches GUI and switching mechanisms tied to the functions of the GUI. Specifically, Connor teaches that "According to the complexity and sophistication of the user's telephony device, a wide variety of switching mechanism can be used to control the spatial audio processor and context switching system 26. Particular embodiments include button or switches 29, such as exist on a telephony set. Fig. 5 shows an alternative embodiment where logical controls are implemented through a GUI 76 on the computer 68." Connor goes on to teach that the listener manipulates the auditory space through the GUI by explicitly positioning icons. Connors teaching

extends to a variety of control which can be obtained by utilizing GUI. With such teaching at hand, it would have been obvious for one of ordinary skill in the art at the time of the invention to implement Connor's system by including variety of control functions which can achieved by a listener having a GUI means.

#### ***Allowable Subject Matter***

5. Claims 2, 4, 5, 9, 11-13, 15-16, 31-33, and 38 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

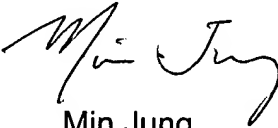
6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The Smits patent, 6,125,115, the McClennon et al. patent, 6,408,327, the Singer et al. patent, 5,889,843, the Dunn et al. patent, 5,991,385, and the Megiddo patent, 6,559,863 are cited for further references.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Min Jung whose telephone number is 703-305-4363. The examiner can normally be reached on Monday-Friday, 7AM-3PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chau Nguyen can be reached on 703-308-5340. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4750.

MJ  
September 30, 2003

  
Min Jung  
Primary Examiner